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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,146	12/21/2001	Thomas N. Turba	RA 5409 (33012/327/101)	2341
27516	7590	03/10/2005	EXAMINER	
UNISYS CORPORATION			LU, KUEN S	
MS 4773			ART UNIT	
PO BOX 64942			PAPER NUMBER	
ST. PAUL, MN 55164-0942			2167	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,146

Applicant(s)

TURBA, THOMAS N.

Examiner

Kuen S Lu

Art Unit

2167

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

1. The Action is responsive to the Applicant's Amendments, filed on March 1, 2005.
2. Applicant's amendments, submitted on March 1, 2005, made to claims 6, 11 and 21 are acknowledged and accepted. The objection to the claims is thereby withdrawn.
3. Also acknowledged and accepted by the Examiner is the Affidavits or Declarations submitted under 37 CFR § 131, wherein the Applicant had attempted to show the Applicant's invention is prior to the effective date of the Crisan reference (U.S. Publication 2003/0191769) which was cited for rejecting Claims 1 to 25. The Examiner reviewed the Declaration and Exhibits A-B, and further acknowledged the Applicant had attempted to establish August 1, 2001 as the priority date of Application's "XML Mapping Tool" invention. Regarding Applicant's proposed amendments filed on March 1, 2005, and further consideration based on the Declaration, the Examiner considered it adequate to remove the Monday reference as prior art. Therefore, the finality of the Office Action for Final Rejection, dated December 21, 2004 is withdrawn, please see MPEP 706.07(e). Shown next is the Office Action for non-Final rejection, based on new grounds.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau et al. (U.S. Publication 2002/0123993, hereafter "Chau") and further in view of Monday (U.S. Patent 6,480,860).

As per Claims 1 and 11, Chau teaches "a document containing a plurality of elements formatted in XML (extensible markup language) transferred from said user terminal to said data base management system" at the Abstract and Page 1, [0014] by describing the background for the invention of transferring XML documents from the user system to a relational database, and at Page 2, [0016] by showing XML document has one or more elements or attributes is described.

Chau does not specifically teach that the transferred document contains data processing service request.

However, Monday teaches XML document containing database service request at Figs. 2 and 4, elements 123, 224 and 410, and col. 7, lines 21-25 by using XML-based format for database service request operation.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Monday with Chau reference because both references are devoted to XML documents and relational database data manipulation operations and the combined reference would have enabled a complete web-based system to invoke a seamless flow of database data service operations without the requirement of user to know specialized database language.

Monday further teaches transferring of XML document to the database management server via a publically accessible digital data communication network at Fig. 1, elements 150-175 and col. 6, lines 32-45 wherein Monday's communication network is publically accessible.

The combined reference further teaches the following:

"an XML mapping tree via which the transformation of each of said plurality of elements is defined which permits conversion of said document to said ordered sequence of native command language script" (See Chau: Fig. 10, element 1000 and Page 30, [0760] where a documents object model tree is generated from an XML formatted data access definition and the definition defines a mapping between relational data and one or more XML documents, and Monday: Figs. 2-3, 5-8 and col. 8, line 29 – col. 9, line 25 where XML files are translated to scripts of commands for data access and retrieval); and

"parsing said XML document into an XML mapping tree" (See Chau: Fig. 10, element 1000 and Page 30, [0760] where a documents object model tree is generated from an XML formatted data access definition and the definition defines a mapping between relational data and one or more XML documents).

As per Claims 6 and 16, Chau teaches "an XML document transferred or transmitted from client to a database management system" at the Abstract and Page 1, [0014] describing the background for the invention of transferring or transmitting an XML

documents from the user system to a relational database and at Page 2, [0016] showing XML document has one or more elements or attributes is described.

Chau does not specifically teach that the XML document defines or describes a service request defining a database management process.

However, Monday teaches XML document containing, defining or describing database service request (See Figs. 5-8 and col. 8, line 50 – col. 9, line 25 where XML files are converted to scripts of commands for data access and retrieval is equivalent to Applicant's XML document containing, defining or describing database service request).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Monday with Chau reference because both references are devoted to XML documents and relational database data manipulation operations and the combined reference would have enabled a complete web-based system to invoke a seamless flow of database data service operations without the requirement of user to know specialized database language.

Monday further teaches the following:

“a publically accessible digital data communication network” at Fig. 1, elements 150-175 and col. 6, lines 32-45 wherein Monday's communication network is publically accessible;

“a database management system having an input format different from XML which involves a native script which is executed by said database management system to honor said service request responsibly coupled to said publically accessible digital data communication network which receives said XML document via said publically

accessible digital data communication network” at Figs. 2-3, 5-8 and col. 6, lines 32-35, col. 8, line 29 – col. 9, line 25 where XML files are translated to scripts of commands for data access and retrieval via a publically accessible communication network.

The combined reference further teaches “an XML mapping tree responsibly coupled to said database management system which involves said native script which is executed by said database management system to honor said service request” (See Chau: Fig. 10, element 1000 and Page 30, [0760] where a documents object model tree is generated from an XML formatted data access definition and the definition defines a mapping between relational data and one or more XML documents, and Monday: Figs. 2-3, 5-8 and col. 8, line 29 – col. 9, line 25 where XML files are translated to scripts of commands for data access and retrieval).

As per Claim 21, Chau teaches a user terminal “using an XML message” at the Abstract and Page 1, [0014] describing the background for the invention of transferring or transmitting an XML documents from the user system to a relational database and at Page 2, [0016] showing XML document has one or more elements or attributes is described.

Chau does not specifically teach that a service request is generated as an XML message.

However, Monday teaches XML document containing, defining or describing database service request (See Figs. 2 and 4, elements 123, 224 and 410, and col. 7, lines 21-25 by using XML-based format for database service request operation is

equivalent to Applicant's XML document containing, defining or describing database service request).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Monday with Chau reference because both references are devoted to XML documents and relational database data manipulation operations and the combined reference would have enabled a complete web-based system to invoke a seamless flow of database data service operations without the requirement of user to know specialized database language.

Monday further teaches the following:

"said legacy database management system responsively coupled to said user terminal via a publically accessible digital data communication network which honors said service request by executing an ordered sequence of command language script" at Figs. 2-3, 5-8 and col. 6, lines 32-35, col. 8, line 29 – col. 9, line 25 where XML files are translated to scripts of commands for data access and retrieval via a publically accessible communication network;

Monday further teaches "a conversion facility responsively coupled to said legacy database management system which parses said XML message to produce said ordered sequence of command language script " (See Figs. 2-3, 5-8 and col. 6, lines 32-35, col. 8, line 29 – col. 9, line 25 where XML files are translated by an XML translator to scripts of commands for data access and retrieval via a publically accessible communication network).

As per Claims 2, 8, 14, 18 and 22, Chau teaches "at least one of said plurality of elements further comprises an attribute which is recorded within said XML mapping tree" at Page 5, [0097] and Page 6, [0108]-[0113] where attributes of elements starting from the root of a tree defined by a formal data model is described.

As per Claims 3 and 13, Chau teaches "document is defined by a Document Type Definition (DTD)" at the Abstract, last section where XML data is mapped from the application DTD to the relational database tables and columns using the document access definition.

As per Claims 4, 7, 12, 17 and 24, Chau teaches "a storage space in which said XML mapping tree is stored for future use" at Page 30, [0760], lines 15-18 and Page 8, [0134] where DAD for mapping XML documents and relational database is created as a file which is a stored object and at Page 33, [0792] where DAD is also stored in database.

As per Claims 5 and 20, Chau teaches "XML mapping tree is displayed on said user terminal in a window" at Page 30, [0760], lines 15-18 and Page 8, [0134] where DAD for mapping XML documents and relational database is created as an XM file, and at Fig. 8, element 802 and Page 29, [0755] where DAD file is displayed.

As per Claims 9, 15, 19 and 25, Chau teaches “publicly accessible digital data communication system further comprises the Internet” at Fig. 1, element 100 and Page 22, [0632] where internet is included in the network architecture.

As per Claims 10, Chau teaches “XML mapping tree is hierarchical” by combining Page 30, [0760] where mapping tree is created as an XML formatted file and Page 8, [0134] where DAD file itself is tree structured document.

As per Claim 23, Chau teaches “conversion facility further comprises an element to source mapping tree” See Figs. 5-6 and Page 3, [0055] where a document access definition extension facility with XML-based and SQL-based form converts the embedded commands to a sequence of ordered SQL statements for being executed by the database management to honor the data service request).

6. The prior art made of record

A. U.S. Publication 2002/0123993

E. U.S. Patent 6,480,860

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

B. U.S. Publication 2002/0156811

C. U.S. Publication 2002/0078768

D. U.S. Publication 2003/0191769

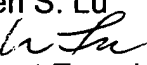
Conclusions

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 571-272-4114.

The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-252-2100.

Kuen S. Lu

Patent Examiner

March 10, 2005



Luke Wassum

Primary Examiner

March 10, 2005